

REMARKS

Reconsideration and allowance of the present patent application based on the following remarks are respectfully requested.

By this Amendment, claims 1, 3, 8, 10, 12-14, 16, 19, 20, 21 and 23 are amended. Support for the amendments to the claims can be found throughout the original description. No new matter has been added. Accordingly, after entry of this Amendment, claims 1-23 will remain pending in the patent application.

In the Office Action, claim 10 was objected to under 37 C.F.R. §1.75(c). In response, claim 10 has been amended to change its dependency from claim 1 only. The amendment to claim 1 obviates the objection. Accordingly, reconsideration and withdrawal of the objection to claim 10 is respectfully requested.

Claim 19 was objected to under 37 C.F.R. §1.75(c). In response, claim 19 has been amended to change its dependency from claim 14 only. The amendment to claim 14 obviates the objection. Accordingly, reconsideration and withdrawal of the objection to claim 19 is respectfully requested.

Claims 12, 13 and 20 were objected to because of informalities noted in the Office Action. In response, claims 12, 13 and 20 have been amended in the manner suggested by the Office. Accordingly, reconsideration and withdrawal of the objections to claims 12, 13 and 20 are respectfully requested.

Claims 14-20 were rejected under 35 U.S.C. §101 as not falling within one of the four statutory categories of inventions. The rejection is respectfully traversed.

While Applicant believes that original claims 14-20 fully comply with the requirement of 35 U.S.C. §101, merely to expedite prosecution of this application, Applicant has amended claim 14 to further tie the claimed method to a network analyzer. The amendment to claim 14 fully overcomes the objection to the claims. In addition, Applicant respectfully submits that claim 14, as amended, satisfies the two prongs of the In Re Bilski test. Claims 15-20 are patentable by virtue of their dependency from claim 14. Accordingly, reconsideration and withdrawal of the rejection of claims 14-20 under 35 U.S.C. §101, are respectfully requested.

Claims 1-2, 10-15 and 19-23 were rejected under 35 U.S.C. §102(e) based on U.S. Pub. No. 2003/0002474 to Alexander *et al.* (hereinafter "Alexander"). The rejection is respectfully traversed.

Claim 1 recites a data merge unit for providing an interleaved data stream, the data stream including data frames received on two or more input channels, wherein complete data frames from each of the two or more input channels are arranged in time-slots of the interleaved data stream, the data merge unit comprising, *inter alia*, "...an output generator to generate the interleaved data stream, the output generator being configured to select complete data frames of a networking protocol from the frame merge buffer and arrange said complete data frames of the said networking protocol in the interleaved data stream."

These aspects of claim 1 are fully supported by the original disclosure. As a non-limiting example, one embodiment of the invention discloses a data merge unit for providing an interleaved data stream. The data merge unit includes an output generator that is arranged to generate an interleaved data stream by selecting complete data frames of a networking protocol from a frame merge buffer. *See* present application at page 4, lines 11-3, page 5, lines 1-10 and page 13, lines 10-16. In other words, according to one embodiment of the invention, the generation of the interleaved data stream is performed on a frame-by-frame basis and not by breaking down received data into any other component blocks or "words."

There is nothing in the cited portions of Alexander that remotely discloses, teaches or suggests these aspects of claim 1.

By way of review, the cited portions of Alexander disclose a "merging network for multiple data streams". The network includes a "butterfly network" arranged to receive plural data streams having "logically related data bits carried on contiguous signal line" and then a "permutation network which moves or rearranges the data streams to create interleaved groups based on input data webs." As stated in paragraph 39 of Alexander, the permutation network 9 rearranges the streams and applies the rearranged streams to the input of the pipelined butterfly network 11. The pipelined butterfly network 11 concatenates data from each input stream separately into wider data words (of constant width, regardless of the width of the input stream) and then merges the words from different streams onto a single output bus in a TDM manner. Thus, the purpose of Alexander is to produce a constant-width interleaved output data stream from a number of mixed width input streams, where the interleaving is performed on an "output width clock per clock cycle basis". This is done so as to simplify processing downstream as the output of the system is a merged data stream of constant data width. In Alexander, the pipelined butterfly network is simply a method of taking mixed width input streams (that may also require some true merging operations) and packing the streams to output width before being TDMed to the output. Thus, bandwidth

may be utilized and a common single interface to post-pipelined butterfly network blocks is allowed for.

That said, Alexander is silent as to using an output generator configured to select complete data frames of a networking protocol from the frame merge buffer, as recited in claim 1. Rather, in Alexander, as noted above, data is broken up into words and then packed into the output stream in such a way as to achieve a uniform width without consideration of the data frame or packet from which the word came. As indicated previously, the main consideration in Alexander is that the output "merged stream" is of constant width and data words are selected accordingly to build up such a stream. Thus, the method of Alexander clearly differs from the invention of claim 1 in which the data merge unit is arranged to work with "complete data frames of a networking protocol". As Alexander does not disclose, teach or suggest these aspects of claim 1, Applicant respectfully submits that claim 1 is patentable over the cited portions of Alexander.

Along these lines, it is noted that the benefits of the system of claim 1 are quite clear as compared to Alexander. In particular, in claim 1, since the interleaved data stream is made up of complete data packets, any software post-processing of captured data frames is obviated. Further, there is no "reconstruction" of data packets or frames required from the merged data stream. This contrasts with the arrangement in Alexander in which the data words are selected based on their width and so as to provide an output stream of a fixed and constant width.

Claims 2 and 10-13 are patentable over the cited portions of Alexander at least by virtue of their dependency from claim 1 and for the additional features recited therein.

Claim 14 is patentable over the cited portions of Alexander for at least similar reasons as provided above for claim 1 and for the features recited therein. Claims 15 and 19-20 are patentable over the cited portions of Alexander at least by virtue of their dependency from claim 14 and for the additional features recited therein. Claim 21 is patentable over the cited portions of Alexander for at least similar reasons as provided above for claim 1 and for the features recited therein. Claims 22-23 are patentable over the cited portions of Alexander at least by virtue of their dependency from claim 21 and for the additional features recited therein.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-2, 10-15 and 19-23 under 35 U.S.C. §102(e) based on Alexander are respectfully requested.

Claims 3-9 and 16-18 were objected to, but would be allowable if rewritten in independent form. In response, claims 3 and 16 have been rewritten in independent form. Thus, claims 3 and 16, as amended, are now in condition for allowance. Claims 4-7 and 9 are allowable at least by virtue of their dependency from claim 3 and for the additional features recited therein. Claims 17 and 18 are allowable at least by virtue of their dependency from claim 16 and for the additional features recited therein. Claim 8 is patentable over the art of record at least by virtue of its dependency from claim 1 and for the additional features recited therein.

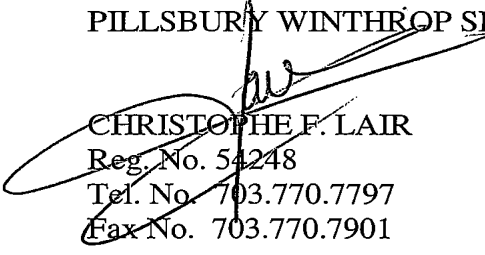
Applicant has addressed the Examiner's rejections and objections and respectfully submits that the application is in condition for allowance. A notice to that effect is earnestly solicited.

If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN LLP



CHRISTOPHE F. LAIR
Reg. No. 54248
Tel. No. 703.770.7797
Fax No. 703.770.7901

JSB/CFL
P.O. Box 10500
McLean, VA 22102
(703) 770-7900